1

SEQUENCE LISTING

<110> Chan, Raquel <120> Transcription factor gene induced by water deficit conditions and abscisic acid from Helianthus annuus, promoter and transgenic plants <130> US PCT <160> 22 <170> PatentIn version 3.1 <210> SEQ ID N°1 <211> 774 <212> DNA <213> Helianthus annuus <400> 1 tcactagtac cataatattc acaaacacac acacctcaga aacgaagctt gcacataatg 60 tetetteaac aagtacecac aacagaaaca accaccagga agaaccgaaa egaggggegg 120 aaacgattta ccgacaaaca aataagtttc ctagagtaca tgtttgagac acagtcgaga 180 cccgagttaa ggatgaaaca ccagttggca cataaactcg ggcttcatcc tcgtcaagtg 240 gcgatatggt tccagaacaa acgcgcgcga tcaaagtcga ggcagattga gcaagagtat 300 aacgcgctaa agcataacta cgagacgctt gcgtctaaat ccgagtctct aaagaaagag 360 aatcaggccc tactcaatca ggtatggttg caaacttaca atgttgcatt caactattta 420 agtagttttg aatttttgtg acaataaaga ttgacaaatg ttgtttgata attgattaac 480 agttggaggt gctgagaaat gtagcagaaa agcatcaaga gaaaactagt agtagtggca 540 gcggtgaaga atcggatgat cggtttacga actctccgga cgttatgttt ggtcaagaaa 600 tgaatgttcc gttttgcgac ggttttgcgt actttgaaga aggaaacagt ttgttggaga 660 ttgaagaaca actgccagac cctcaaaagt ggtgggagtt ctaaagagta aagaaggatg 720 tagaagtagt agagtaaaaa ctaaaacata ccagatagtt ggtttacact ttgt 774 <210> SEO ID N°2 <211> 673 <212> DNA <213> Helianthus annuus <400> 2 tcactagtac cataatattc acaaacacac acacctcaga aacgaagctt gcacataatg 60 tctcttcaac aagtacccac aacagaaaca accaccaqqa aqaaccgaaa cgagqqcqq 120 aaacgattta ccgacaaaca aataagtttc ctagagtaca tgtttgagac acagtcgaga 180 cccgagttaa ggatgaaaca ccagttggca cataaactcg ggcttcatcc tcgtcaagtg 240 gcgatatggt tccagaacaa acgcgcgcga tcaaagtcga ggcagattga gcaagagtat 300

PCT/US2003/013770

aacgcgctaa	agcataacta	cgagacgctt	gcgtctaaat	ccgagtctct	aaagaaagag	360
aatcaggccc	tactcaatca	gttggaggtg	ctgagaaatg	tagcagaaaa	gcatcaagag	420
aaaactagta	gtagtggcag	cggtgaagaa	tcggatgatc	ggtttacgaa	ctctccggac	480
gttatgtttg	gtcaagaaat	gaatgttccg	ttttgcgacg	gttttgcgta	ctttgaagaa	540
ggaaacagtt	tgttggagat	tgaagaacaa	ctgccagacc	ctcaaaagtg	gtgggagttc	600
taaagagtaa	agaaggatgt	agaagtagta	gagtaaaaac	taaaacatac	cagatagttg	660
gtttacactt	tgt					673

<210> SEQ ID N°3

<211> 1221

<212> DNA

<213> Helianthus annuus

<220>

<221> promoter

<222> (1)..(1221) <223> Large allele

<400> 3 gatccaattg gaccacctgg cacatcgtat cttatctctt ttgtcgtttc caacacacca 60 120 caacacact acaaacqtgt caattcacac ttcaccaatt tcatttcctt ttagtcaatc atattaaaag tagtagcccc cacccccatt tgttacctac catttcccac tttaataatc 180 acccacgcta tgtccacttg tacttttgtt tgcacacaac tcttcccata aaatatcaaa 240 300 ccaaattttt tttagtggaa aacaaattcc ccaaatagaa tactaacgaa attcatcgca tcagaataca ctcatctctg aacagtggcg aagcttgacg ttttcgacgg ggggtcggaa 360 420 aacgtatgta cccgaaattt ctatagaatc ggggggtcga aaacgtatat acccaaaatt 480 totatacgaa aactacatat ataacactac tgagcaaaaa gttcgggggt tcgggcgccc ctcccggccc cttcaaagct tcgccaatgt ctctgaaccg aagaaaaccc tcactcgtct 540 600 actagecaat gaateeteac cagggaaace etcactegte ttactggaet attggegett 660 ccaaatggac tacttgcgaa attcaccaca tcgggataca ctcgtctact gcggtgaggt 720 aaaacccgct tggctcaagg atcgaactag cgattgctgc ctactcgcct aatctcccat 780 catcaacagg tgccgccgaa acaaaatgct gggggcggga gttgaaccta ggtccagtga cgcacccatg aattttttt ctagggatgc gaacgagtgg tttaaccata cttttaagag 840 gtgcgatcgg aaattttacc tataaaaatac actaaaaaag ttccaagggt ccacccaccc 900 cttaacctaa gtccgccttt gtctggatca cgtgaaacat caggtctctc ccttaccagt 960 ccagctacga ctcattgaca aaatatcaaa accatatgat tttgagtttt atctcaaccg 1020

aaagtga	acat catgacagag aatcgacata accaaaacgt gtaaacgtac aactcaccat	1080
tgcgttg	gaaa aggacaaaac aggtaggatt cttgtcaaat tcaacgcgta cacctgtgct	1140
tcatcta	aaac cccatacttt aagaaccttt ataaagacca ctcactatat atacacatat	1200
ataatat	tcac ttatcaaacc c	1221
<210>	SEQ ID N°4	
<211>	28	
<212>	DNA	
<213>	Artificial	
<220>		
<223>	Designed oligonucleotide based on the promoter and having Hi	ind I
<400>	4	20
gcgaag	cttg atgcgaacga gtggttta	28
-2305	SEQ ID N°5	
		
<211>	28	
<212>		
<213>	Artificial	
<220>		
<223>	Designed oligonucleotide based on the promoter and having Sasite	al I
.400.		
<400>	5	28
geggte	gaca cetggeacat egtatett	20
<210>	SEQ ID N°6	
<211>	-	
<212>		
	Artificial	
<220>		
<223>	Designed oligonucleotide based on the promoter and having Bar	n HI
	site	
<400>	6	
cgcgga	atccg agggtttgat aagtgat	27
-210-	CPO ID NO7	
<210>	SEQ ID N°7	
<211>		
<212>		
<213>	Artificial	
<220>		
<223>	Designed oligonucleotide based on the promoter and having H	ind I
<400>	7	
	getta acetaagtee geetttg	27

PCT/US2003/013770

<210><211><212><212><213>	27 DNA	ID N°8					
<220> <223>	Desi I si	_	ucleotide b	ased on the	promoter a	nd having Hind	II
<400> ggcaago	8 ctta	tctcaaccga	aagtgac				27
<211> <212>	19 DNA	ID N°9					
<220> <223> Designed oligonucleotide based on the 5' promoter							
<400> atttcg	9 caag	tagtccatt					19
<210><211><212><212><213>	1019 DNA	ID N°10 5 ianthus annu	ius				
<400> gatcca	10 attg	gaccacctgg	cacatcgtat	cttatctctt	ttgtcgtttc	caacacacca	60
caacac	acct	acaaacgtgt	caattcacac	ttcaccaatt	tcatttcctt	ttagtcaatc	120
atatta	aaag	tagtagcccc	cacccccatt	tgttacctac	catttcccac	tttaataatc	180
acccac	gcta	tgtccacttg	tacttttgtt	tgcacacaac	tcttcccata	aaatatcaaa	240
ccaaat	tttt	tttaatggaa	aacaaatact	tcaaatgcac	tattggtgaa	attcaccaca	300
tcagaa	taca	cccgtctcta	ctcatctact	ggccaacgaa	tcttcacggg	ggaaaccctc	360
actcgt	ctac	tgggactact	ggcgcttcaa	aatggactac	tgacaaaatt	caccacatcg	420
ggatac	actt	gtctactgcg	gtgaggtaaa	atccgccgct	cagctcaatg	atcgaactag	480
cgatcg	ccac	ccactcacct	tgtctcccat	catcaccagg	tgccgccaaa	acaaaatgtt	540
gggggc	ggga	attgaaccta	ggtccagtgg	cgcacccatg	aattttttt	ctagggatgc	600
gaacga	gtga	tttaaccata	cttttaagag	gtgcgatcgg	aaattttacc	tataaaatat	660
actaaa	aaaa	tttcaagggt	ccgcccaccc	accccttaac	ctaagtccgc	ctctgcctgg	720
atcacg	tgaa	acatcaggtc	tctctcttac	cagttcacct	acaactcatt	gacaaaatat	780
caaaac	cata	tgattttgag	ttttatctca	accgaaagtg	acatcatgac	agagaatcga	840
cataac	caaa	acgtgtaaac	gtacaactca	ccattgcgtt	gaaaaggaca	aaacaggtag	900

gattettgte aaatteaacg cgtacacetg tgetteatet aaaceceata etttaagaac 960 ctttataaag accactcact atatatacac atatataata tcacttatca aaccc 1015 <210> SEQ ID N°11 <211> 28 <212> DNA <213> Artificial <220> <223> Designed oligonucleotide that matches nucleotides 81-100 of the H ahb-4 cDNA sequence and having Bam HI site <400> 11 28 ggcggatcca acagaaacaa ccaccagg <210> SEQ ID N°12 <211> 29 <212> DNA <213> Artificial <220> <223> Designed oligonucleotide for cloning 5' cDNA and having Bam HI s <400> 12 ggcggatccc ctggtggttg tttctgttg 29 <210> SEQ ID N°13 <211> 34 <212> DNA <213> Artificial <220> <223> oligonucleotide based on 5' cDNA and having Xho I site <400> 13 gaggactcga gctcaagttt tttttttt tttt 34 <210> SEQ ID N°14 <211> 18 <212> DNA <213> Artificial <220> <223> Oligonucleotide based on 5' cDNA and having Xho I site <400> 14 18 gaggactcga gctcaagc <210> SEQ ID N°15 <211> 29 <212> DNA <213> Artificial

<220> <223>	Designed oligonucleotide based on the promoter and having Ecosite	RI
<400>	15	
	ttca gattgagcaa gagtataac	29
•		
.010.	SEQ ID N°16	
<210>		
<212>		
	Artificial	
<220>	Designed oligonucleotide based on the promoter	
<223>	Designed offigoracteotide based on the promotor	
<400>	16	
	ataa agaccactc	19
	000 TD 11017	
<210> <211>	SEQ ID Nº17	
<211>		
	Artificial	
<220>	and the second on the magnetor	
<223>	Designed oligonucleotide based on the promoter	
<400>	17	
	atggt gagttgtac	19
<210> <211>	SEQ ID N°18	
<211> <212>		
	Artificial	
	•	
<220>	and the second binding appared	
<223>	oligonucleotide to DNA-binding assays	
<400>	18	
	agatc tcaataattg agag	24
	4010	
<210> <211>	SEQ ID N°19	
<211> <212>		
	Artificial	
<220>		
<223>	oligonucleotide to DNA-binding assays	
<400>	19	
	tctca attattgaga tctg	24
J == = = =	- -	
	SEQ ID N°20	
<211>	DNA	
	Artificial	
-220/		

PCT/US2003/013770

<220>		
<223>	Oligonucleotide having Bam HI site	
<400>		
gcggga	teca ceatgtetet teaacaagta	30
~210×	SEQ ID N°21	
<211>		
<212>		
<213>	Artificial	
<220>		
<223>	Oligonucleotide having Sac I site	
<400>		
gccgag	ctct tagaactcca accacttttg	30
.210-	CEO ID NA22	
<210>	SEQ ID N°22	
<212>		
<213>	Artificial	
<220>		
<223>	Oligonucleotide having Bam HI site	
<400>	22	
ggcgga	teeg teteceagtt gttette	27